Strongylocoris ferreri n. sp. from Andalusia (Spain), southern Iberian Peninsula (Hemiptera: Heteroptera: Miridae)

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Abstract

A new plant bug species of the genus *Strongylocoris* (Miridae: Orthotylinae: Halticini) is described on the basis of a single specimen from Algeciras (province of Cádiz), Andalusia (Spain), southern Iberian Peninsula. *Strongylocoris ferreri* n. sp. is easily separated from the remaining species of the genus by its external morphology and the shape of the left paramere.

Key words: Halticini, Heteroptera, Miridae, Orthotylinae, southern Iberian Peninsula, *Strongylocoris ferreri* n. sp., taxonomy.

Resum. Strongylocoris ferreri *n. sp. d'Andalusia (Espanya), sud de la península Ibèrica (Hemiptera: Heteroptera: Miridae)*

Es descriu un nou mírid del gènere *Strongylocoris* (Miridae: Orthotylinae: Halticini) amb un únic mascle d'Algesires (província de Cadis), Andalusia (Espanya), sud de la península Ibèrica. Es tracta de *Strongylocoris ferreri* n. sp., que se separa de la resta d'espècies del gènere per la morfologia externa i per la forma del paràmer esquerre.

Paraules clau: Halticini, Heteroptera, Miridae, Orthotylinae, sud de la península Ibèrica, *Strongylocoris ferreri* n. sp., taxonomia.

Resumen. Strongylocoris ferreri *n. sp. de Andalucía (España), sur de la Península Ibérica (Hemiptera: Heteroptera: Miridae)*

Se describe una nueva especie de mírido del género *Strongylocoris* (Miridae: Orthotylinae: Halticini) sobre la base de un único ejemplar macho de Algeciras (provincia de Cádiz), Andalucía (España), sur de la Península Ibérica. *Strongylocoris ferreri* n. sp. queda bien diferenciada de las demás especies del género por su morfología externa y la forma del parámero izquierdo.

Palabras clave: Halticini, Heteroptera, Miridae, Orthotylinae, sur de la Península Ibérica, *Strongylocoris ferreri* n. sp., taxonomía.

Introduction

Strongylocoris Blanchard, 1840 is a Palaearctic genus of plant bugs (Hemiptera: Heteroptera: Miridae) belonging to the tribe Halticini of the subfamily Orthotylinae. The genus currently comprises 15 species (Drapolyuk & Kerzhner, 2000; Kerzhner & Josifov, 1999) of medium size (3-6 mm), more or less sturdy appearance and dark coloration. Among them, 11 are known to belong to the European fauna and 7 of them have been recorded from the Iberian Peninsula, *S. franzi* Wagner, 1955 and *S. seabrai* Schmidt, 1939 being regarded as Iberian endemic taxa.

After re-examination of the Heteropteran material collected by Juan de Ferrer in Algeciras (Cádiz, Andalusia, southern Iberian Peninsula) and sent to the first author some years ago, we herein describe one further species of *Strongylocoris*, following Eduard Wagner's suggestion as well. It is made on the basis of a single specimen, since no additional material has been collected afterwards.

Strongylocoris ferreri n. sp.

Type material

Holotype: male, mounted on card (between the card and the labels, a second card bears the genitalic structures), with four labels: (1) "Algeciras / (Cádiz) / 1-VI-72 Ferrer" [white, handwritten]; (2) "Strongylocoris / sp. male genitalia" [white, handwritten]; (3) "Strongylocoris / nov. spec. / E. Wagner det. 73" [white, hand- and typewritten]; (4) "*Strongylocoris* / *ferreri* n. sp. / HOLOTYPE / J. Ribes & Pagola-Carte" [red, typewritten]. Deposited in the J. Ribes collection, Barcelona, Catalonia.

Type locality

Algeciras, province of Cádiz, Andalusia (Spain), southern Iberian Peninsula.

Description

Length = 5.0 mm. Ovate, narrowing in the posterior third. Two times longer than basal width of pronotum. General coloration black and red (Figs. 1a-b). Shiny.

Dorsal vestiture dense and quite uniform, consisting of semierect to reclining hairs variable in color depending on the angle of light incidence: from dark to shining pale, either silvery white (upon black teguments) or golden (upon red ones). Hairs more erect in regions of the head and anterolateral margins of pronotum.

Antennae bearing black hairs of two sizes, the greater ones almost as long as the width of the respective joint. Hairs of the legs also black and at least of two lengths, particularly covering the angular edges of femora and the whole tibiae.

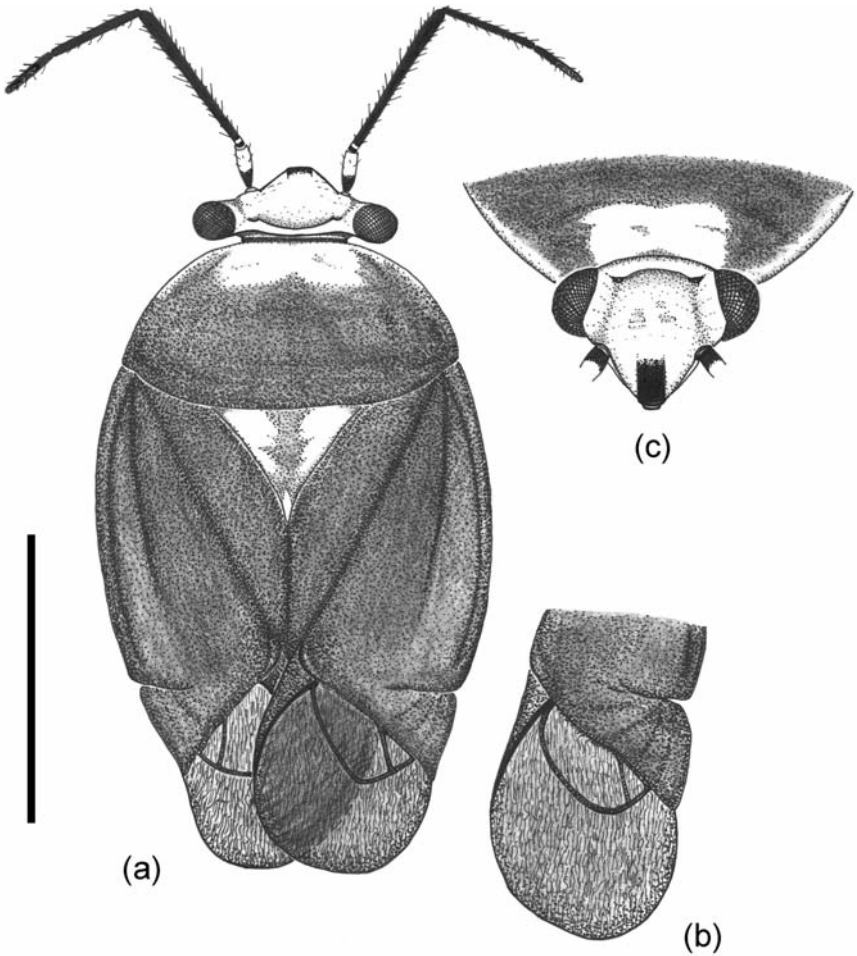

Figure 1. *Strongylocoris ferreri* n. sp. a: Habitus of the holotype, male. Vestiture of the body, punctuation and legs omitted. Antennae not exactly as in the specimen, but "reconstructed" from detached joints; b: Real dorsal view of the hemelytral distal region (avoiding distortion due to its bending); c: Head in frontal view. Vestiture and antennae omitted (Scale bar = 2 mm).

Tibial hairs stouter and interspersed with the rows of spines, which are black and arise from indistinct, small, blackish spots; spines and some of the hairs, as long as tibial width.

Head (Figs. 1a, c) red with black clypeus, smooth, in frontal view 1.35x broader than high; head length = 0.75 mm; head width (diatone) = 1.42 mm; head height = 1.05 mm. Vertex bearing a strongly distinct, thick, backwards curved margin, which is enlarged to each side towards a juxtaocular flat area provided with a punc-

tiform, ocellus-like fossa. A frontal depression is thus circumscribed, delimited by such margin on the top, extending downwards to the base of the tylus and antennal fossae, and reaching jugae without interruption. Ocular index = 2.75; eye width = 0.298 mm; synthlipsis (minimum interocular distance) = 0.820 mm. Antennae typically shaped; first joint clavate, red except for the basal third, which is black; second joint black with a narrow sub-basal red ring, gradually thickened distally, diameter near apex roughly as broad as that of first joint; third joint black, cylindrical; fourth joint also black but somewhat paler in its apical half; length of antennal joints: I – II – III – IV = 0.30 – 1.15 – 0.70 – 0.42 mm; second joint 0.80x as long as head width. Rostrum reaching metacoxae, with the first joint red and thick; remaining joints black and slender.

Pronotum trapezoidal, maximum width = 2.30 mm, 1.90x broader than long, black, bearing faint and dense punctuation, except in the calli, which are red and smooth; anterolateral margins also with a narrow red strip, almost imperceptible from above (compare Figs. 1a, c).

Scutellum triangular, red and smooth, with a middle, longitudinally depressed and darkened region, provided with weak transversal rugosities, and terminating posteriorly in a pale tip.

Hemelytra black, with faint and dense punctuation. Membrane and its veins dark; fully developed; abundant, but very indistinct, longitudinal, vermiform striations; cells smoother.

Ventral face red, with several black areas.

Legs red, with the distal apex of tibiae and all tarsomeres black. Length of metatarsal joints: I – II – III = 0.22 – 0.22 – 0.25 mm (claw = 0.10 mm).

Male genitalia. Right paramere lost. Left paramere as in Fig. 2 (some comparative remarks in the Discussion section).

Female unknown.

Etymology

Dedicated to our friend Juan de Ferrer, a passionate coleopterist who has been providing the Iberian entomology with thousands of interesting collectings for several decades. Iberian Heteropterology is very much indebted to him.

Distribution

So far only known from the type locality.

Discussion

Among Halticini, the new species is placed in the genus *Strongylocoris* on the basis of the second metatarsomere no longer than the first one, the general shape or appearance and some other features of external morphology, such as the short antennae (no longer than half the body length), with the third joint longer than the fourth one, and the eyes higher than long in lateral view (Wagner, 1974).

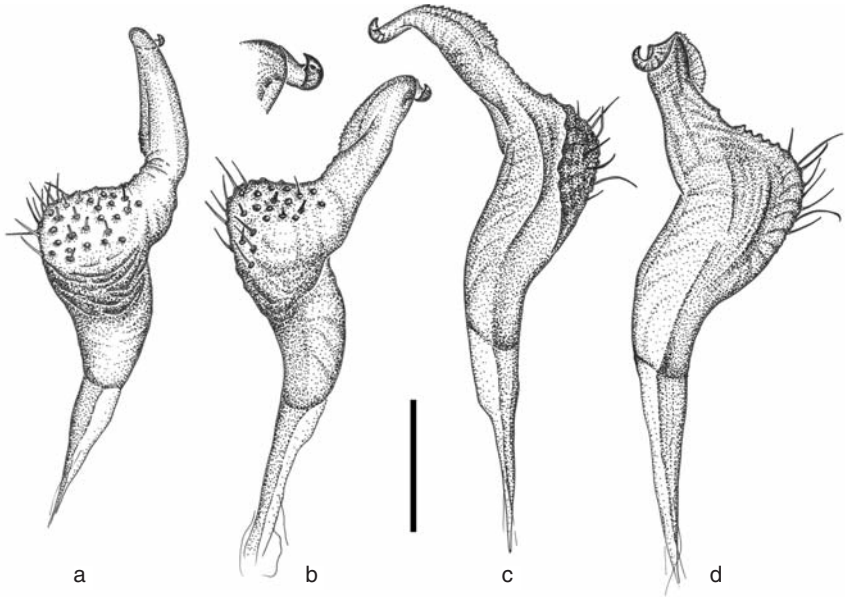

Figure 2. *Strongylocoris ferreri* n. sp. Male genitalia: left paramere in different views (Scale bar = 0.2 mm); a and b, ventral views; c and d, dorsal views.

Three groups may be established to organize *Strongylocoris* species. One includes only *S. cicadifrons* A. Costa, 1853, which is sexually dimorphic, exhibits several unique morphological features, and depends on Cistaceae. A second group includes all black colored and bluish tinged species with marked sexual dimorphism and depending mainly on Apiaceae; it is composed of *S. atrocoeruleus* (Fieber, 1864), *S. coerulescens* Lindberg, 1940, *S. enki* Linnavuori, 1984, *S. niger* (Herrich-Schaeffer, 1835) and *S. raimondoi* Carapezza, 1991.

A third group includes black, brown or red colored *Strongylocoris* species, lacking obvious sexual dimorphism and, as far as known, being basically linked to Campanulaceae (Rieger, 1996; Wachmann et al., 2004; Wagner, 1974). To this group belong *S. amabilis* (Douglas & Scott, 1868), *S. erythroleptus* A. Costa, 1853, *S. franzi* Wagner, 1955, *S. leucocephalus* (Linnaeus, 1758), *S. luridus* (Fallén, 1807), *S. oberthuri* Reuter, 1905, *S. obscurus* (Rambur, 1839), *S. seabrai* Schmidt, 1939, *S. steganoides* (J. Sahlberg, 1875), and now *S. ferreri* n. sp.

Three morphological aspects undoubtedly have an outstanding diagnostic value in *S. ferreri* n. sp.: the red patch of the pronotal calli, the strongly marginated vertex and associated fossae, and the shape of the left paramere. The last two characters are to some extent shared only with *S. obscurus*, which we regard a rather close species. In *S. obscurus*, however, the ratio head width/height is 1.43-1.48 (1.34 in *S. ferreri* n. sp.) and the coloration is uniformly ochraceous or brown.

The left paramere of *S. ferreri* n. sp. has proved to be of great interest. In addition to other features of its shape (body broad, sensory lobe rounded and some-

what concave, comb at the distal half of the hypophysis), a special attention deserves the atypically, extremely twisted, tip of the hypophysis (Fig. 2).

Strongylocoris ferreri n. sp. is greater than the brownish species *S. franzi*, *S. luridus* and *S. seabrai* and the blackish species *S. steganoides*. According to general coloration, *S. ferreri* n. sp. is very close to *S. amabilis* and *S. erythroleptus*. However, *S. ferreri* n. sp. has not the external margin of hemelytra and the whole cuneus red, as is the case in *S. amabilis* and *S. erythroleptus*. From *S. leucocephalus* and *S. oberthuri*, *S. ferreri* n. sp. differs considerably in its left paramere: body stouter, sensory lobe more marked, hypophysis bearing comb and with the apical tip much more curved and twisted. In addition, in *S. leucocephalus* the pronotal punctuation is much deeper and the coloration completely different, and in *S. oberthuri* the second antennal joint is about 1.0x as long as head width (only 0.8x in the new species).

To summarize, *S. ferreri* n. sp. is easy to recognize by its marginated vertex, black and red dorsal pattern, and left paramere of male genitalia.

Acknowledgements

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